

ASAP

Dart Aerospace Ltd.

Date: Friday, 07/12/2007 1:19:47 PM  
 User: Linda Lacelle

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : WEARPLATE
<b>Job Number</b> : 36169	
<b>Estimate Number</b> : 10741	
<b>P.O. Number</b> : <i>N/A</i>	<b>Part Number</b> : D33151
<b>This Issue</b> : 07/12/2007 <b>S.O. No.</b> : <i>N/A</i>	<b>Drawing Number</b> : D3315 REV. B
<b>Prsht Rev.</b> : NC	<b>Project Number</b> : N/A
<b>First Issue</b> : <i>N/A</i> <b>Type</b> : SMALL /MED FAB	<b>Drawing Revision</b> : B
<b>Previous Run</b> : 36169	<b>Material</b> : <i>N/A</i>
<b>Written By</b> : _____	<b>Due Date</b> : 24/12/2007 <b>Qty:</b> 6 <b>Um:</b> Each
<b>Checked &amp; Approved By</b> : _____	
<b>Comment</b> : Est: A 05.05.12 New issue KJ/JLM	
Est Rev:B As per Rev B 06-03-24 JLM	
Est Rev:C now water jet 07-12-06 DD	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	M1010S16GA	1010/1025/A21/6aA SHEET



**Comment:** Qty.: 1.7628 sf(s)/Unit Total : 10.5768 sf(s)  
 1010/1025/A21/6aA SHEET  
 batch *105706* *HB 07-12-10*

2.0	WATER JET	FLOW WATER JET
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**Comment:** FLOW WATER JET  
 1-Cut as per Dwg D3315  
 Dwg Rev: *B*  
 Prog Rev: *B*

*HB 07-12-10**(6)*

2-Deburr if necessary

*HB 07-12-10*

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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*HB 07-12-10***Comment:** INSPECT PARTS AS THEY COME OFF MACHINE

4.0	QC8	SECOND CHECK
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**Comment:** SECOND CHECK*5 7/12/10 (46)*

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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**Comment:** SMALL & MEDIUM FAB RESOURCE 1  
 Deburr if necessary

*Done @ step #2.2*

Date: Friday, 07/12/2007 1:19:47 PM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 36169

Part Number: D33151

Job Number:



Seq. #: Machine Or Operation: Description :

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

1- Form using DT8751 Die as per Dwg D3315 Rev: B

2- Form using DT8179 Die and form joggle using DT8157 as per Dwg D3315 Rev: B

7.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

8.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld hard surface using D3315-1T3 as per QSI 004 and Dwg D3315 Rev: B

Qty Part Number Description Batch

A/R N/A 7560 Hardcoat Rod

M105 844

FE

07/12/11

9.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

QC5 -> 5/12/11

QC9 -> 11/12/11

10.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

MS

07-12-11

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

M-1

07/12/12

12.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify on inside surface using a permanent fine point marker with the following:

TCCA-PDA, Dart Aerospace Ltd.

P/N: D3315-1, B/N: BXXXXX

For Product Eligibility see PDA04-17

and Stock

Location: 57996

AS

07/12/12

(X6)

Date: Friday, 07/12/2007 1:19:47 PM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 36169

Part Number: D33151

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

QC21

FINAL INSPECTION/W/O RELEASE



②

Comment: FINAL INSPECTION/W/O RELEASE

12/12/12


Job Completion



✓ 07.12.12

Date: Friday, 07/12/2007 7:42:43 AM  
User: Linda Lacelle

**Process Sheet**

<b>Customer</b> :	CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> :	WEARPLATE
<b>Job Number</b> :	36169		
<b>Estimate Number</b> :	10741		
<b>P.O. Number</b> :		<b>Part Number</b> :	D33151
<b>This Issue</b> :	07/12/2007	<b>S.O. No.</b> :	
<b>Prsht Rev.</b> :	NC	<b>Drawing Number</b> :	D3315 REV. B
<b>First Issue</b> :	/ /	<b>Project Number</b> :	N/A
<b>Previous Run</b> :	25725	<b>Drawing Revision</b> :	B
	<b>Type</b> :	<b>Material</b> :	
	PURCHASED PARTS	<b>Due Date</b> :	24/12/2007
<b>Written By</b> :		<b>Qty:</b>	6
<b>Checked &amp; Approved By</b> :		<b>Um:</b>	Each
<b>Comment</b> :	Est: A 05.05.12 New issue KJ/JLM Est Rev B As per Rev B 06-03-24 JLM		

**Additional Product**

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
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1.0	PG	PURCHASING
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**Comment:** PURCHASING

Issue P/O: \_\_\_\_\_  
 Email or Ship DXF file to vendor  
 Laser Cut flat pattern per Dwg D3315  
 Possible Supplier: Industrial Laser  
 Material release note is required

*Waterjet*

2.0	D33151F	Wearplate, LH Fwd
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**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)  
 WEARPLATE LH FWD

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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**Comment:** PACKAGING RESOURCE #1

Recieve & Inspect for Transit Damage  
 Ensure Material Release Note is attached

4.0	QC6	DIMENSIONAL CHECK
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**Comment:** DIMENSIONAL CHECK

Inspect dimensions as per inspection template D3315-1T2

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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**Comment:** SMALL & MEDIUM FAB RESOURCE 1  
 Deburr if necessary

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Friday, 07/12/2007 7:42:43 AM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 36169

Part Number: D33151

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

1- Form using DT8751 Die as per Dwg D3315 Rev: \_\_\_\_\_

2- Form using DT8179 Die and form joggle using DT8157 as per Dwg D3315 Rev: \_\_\_\_\_

7.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

8.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld hard surface using D3315-1T3 as per QSI 004 and Dwg D3315 Rev: \_\_\_\_\_

Qty	Part Number	Description	Batch
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A/R	N/A	7560 Hardcoat Rod	
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9.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

10.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

12.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify on inside surface using a permanent fine point marker with the following:

TCCA-PDA, Dart Aerospace Ltd.

P/N: D3315-1, B/N: BXXXXX

For Product Eligibility see PDA04-17

and Stock

Location: \_\_\_\_\_

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 07/12/2007 7:42:43 AM  
User: Linda Lacelle

## Process Sheet

**Customer:** CU-DAR001 Dart Helicopters Services

**Drawing Name:** WEARPLATE

**Job Number:** 36169

**Part Number:** D33151

Job Number:



**Seq. #:**

**Machine Or Operation:**

**Description :**

13.0

QC21

FINAL INSPECTION/W/O RELEASE



**Comment:** FINAL INSPECTION/W/O RELEASE

Job Completion





W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

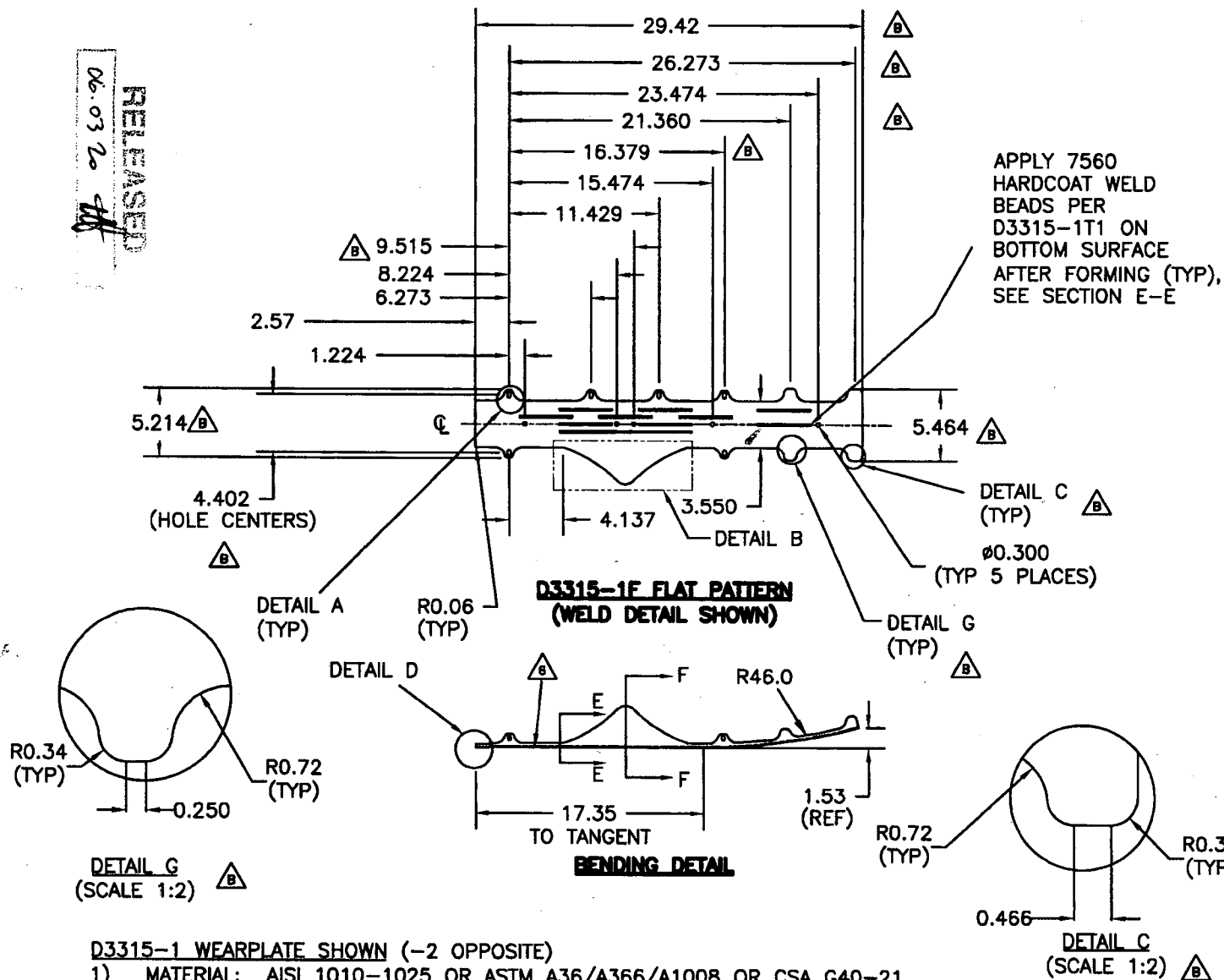
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**DART**

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
04	04	
CHECKED	APPROVED	DRAWING NO.
		D3315
DATE	TITLE	REV. B
06.01.31	WEARPLATE	SHEET 1 OF 4
A	04.09.10	NEW ISSUE
B	06.01.31	UPDATE DIMENSIONS
		SCALE 1:12



**D3315-1 WEARPLATE SHOWN (-2 OPPOSITE)**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) WELD PER DART QSI 004
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) IDENTIFY ON INSIDE SURFACE AS INDICATED  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X  
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

RELEASED

06.03.20

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

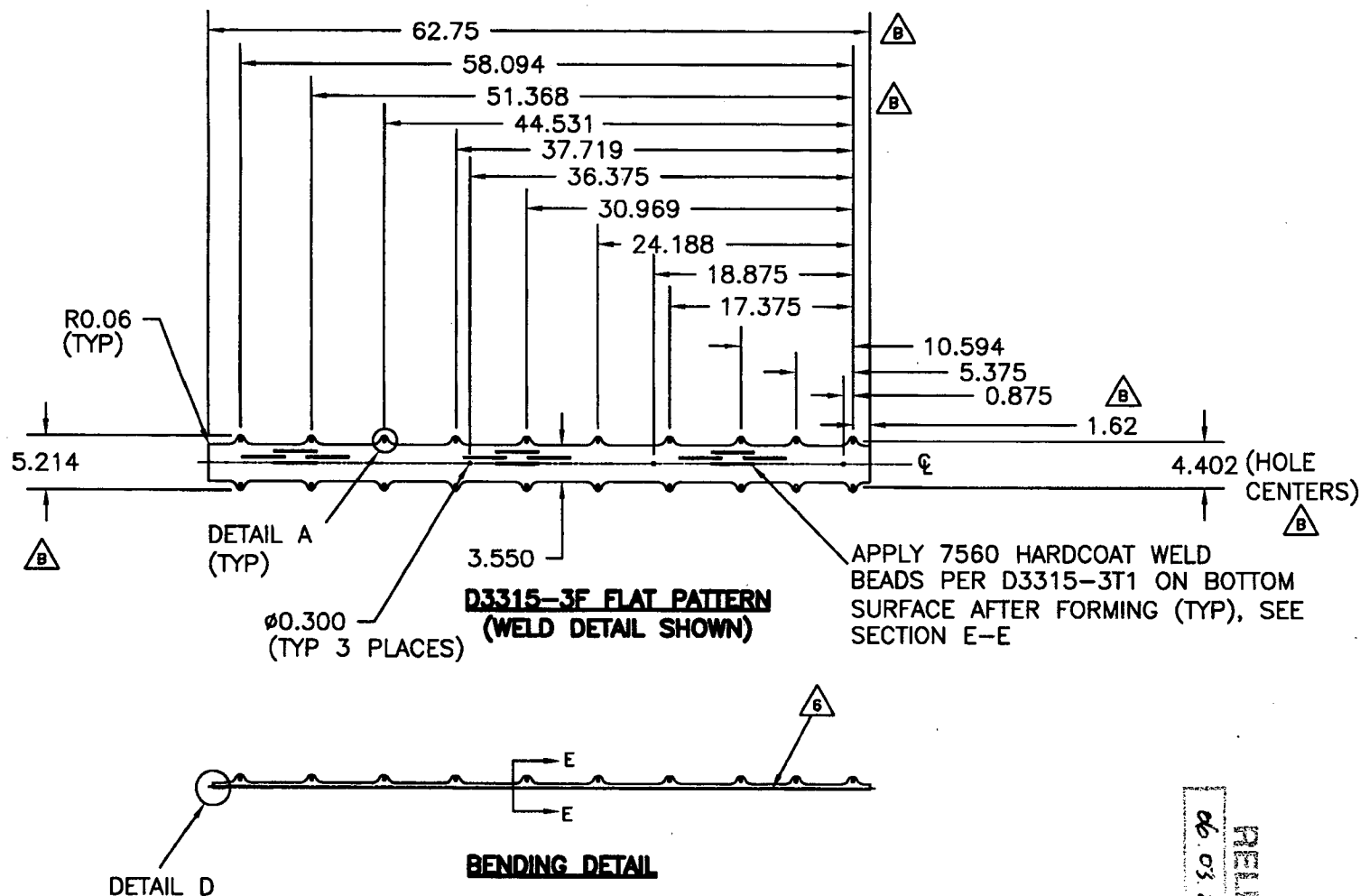
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**DART**



**D3315-3 WEARPLATE SHOWN (-4 OPPOSITE)**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) WELD PER DART QSI 004
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) IDENTIFY ON INSIDE SURFACE AS INDICATED  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X  
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

RELEASED  
26 03 20

DESIGN	PH	DRAWN BY	PH	DART AEROSPACE LTD HAMKESBURG, ONTARIO, CANADA
CHECKED	PH	APPROVED	PH	
DATE	06.01.31	DRAWING NO.	D3315	REV. B
		TITLE	WEARPLATE	SHEET 2 OF 4
		SCALE	1:16	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

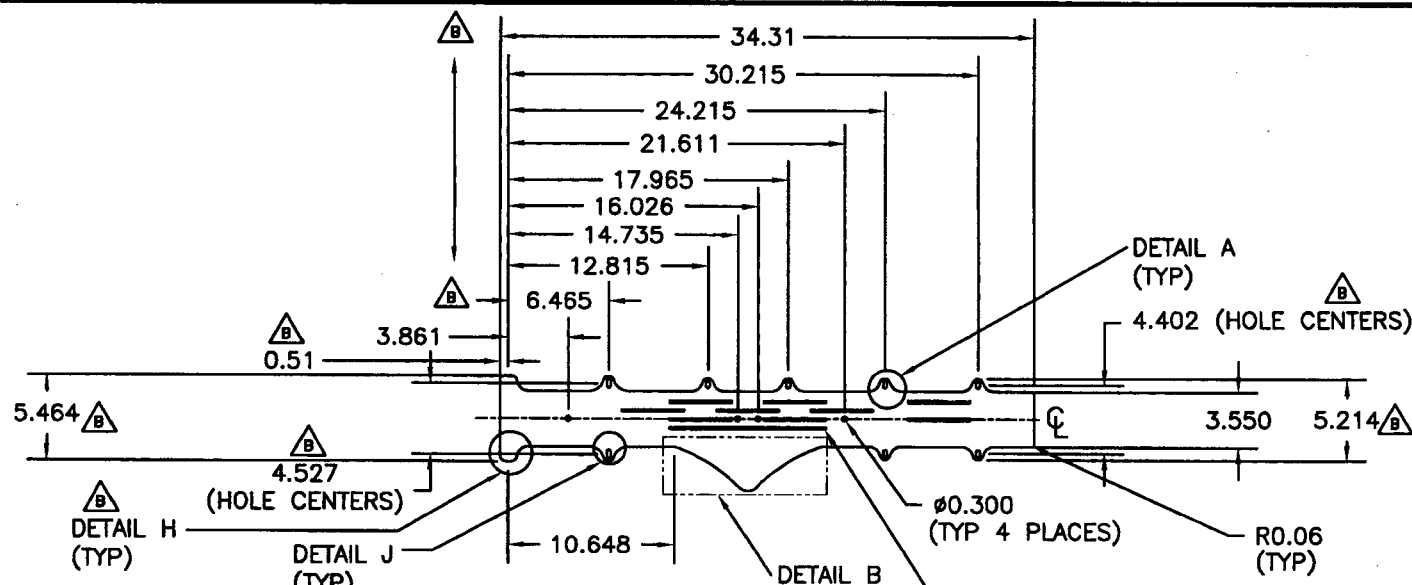
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

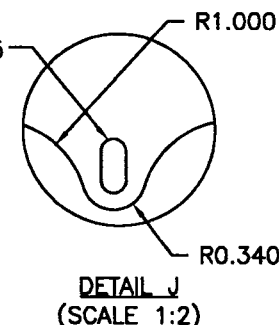
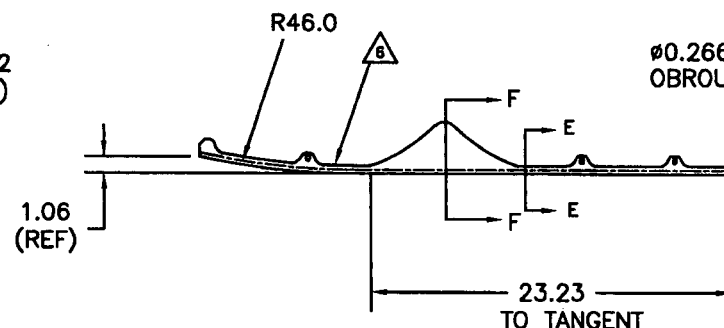
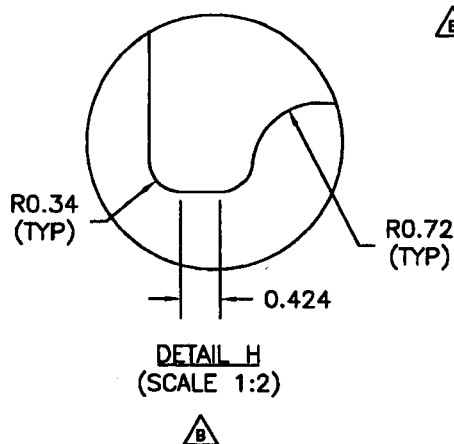
**DART**

DESIGN	PH	DRAWN BY	PH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA
CHECKED		APPROVED		DRAWING NO. D3315
DATE	06.01.31	TITLE	WEARPLATE	REV. B
		SCALE	1:12	SHEET 3 OF 4



**D3315-5F FLAT PATTERN  
(WELD DETAIL SHOWN)**

APPLY 7560 HARDCOAT WELD  
BEADS PER D3315-5T1 ON BOTTOM SURFACE  
AFTER FORMING (TYP), SEE SECTION E-E



**D3315-5 WEARPLATE SHOWN (-6 OPPOSITE)**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) WELD PER DART QSI 004
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSION ARE IN INCHES
- 6) IDENTIFY ON INSIDE SURFACE AS INDICATED  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X  
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

RELEASED  
06 03 20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

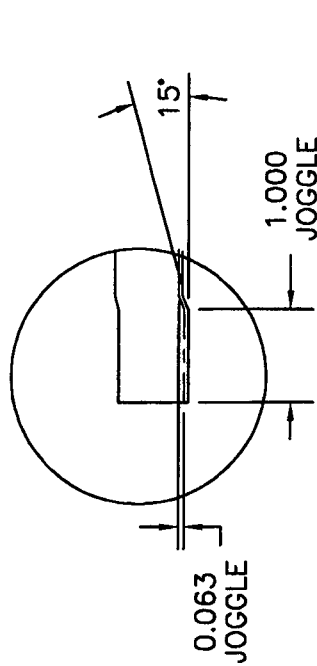
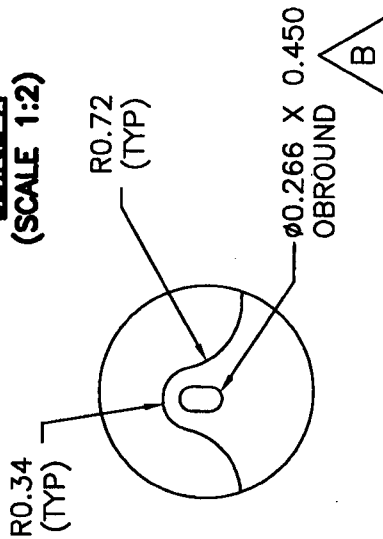
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

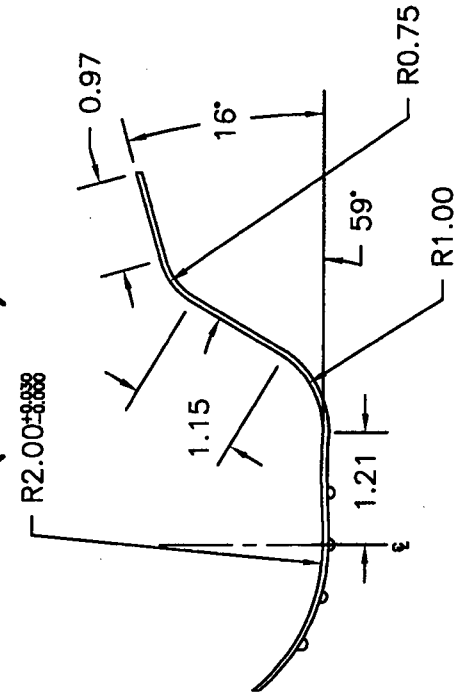
**DART**

DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. D3315	REV. B SHEET 4 OF 4
DATE 06.01.31		TITLE WEARPLATE	SCALE NTS

**DETAIL A**  
(SCALE 1:2)



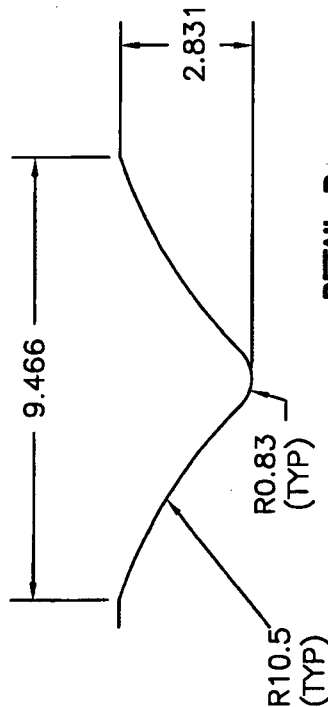
**DETAIL D**  
(SCALE 1:2)



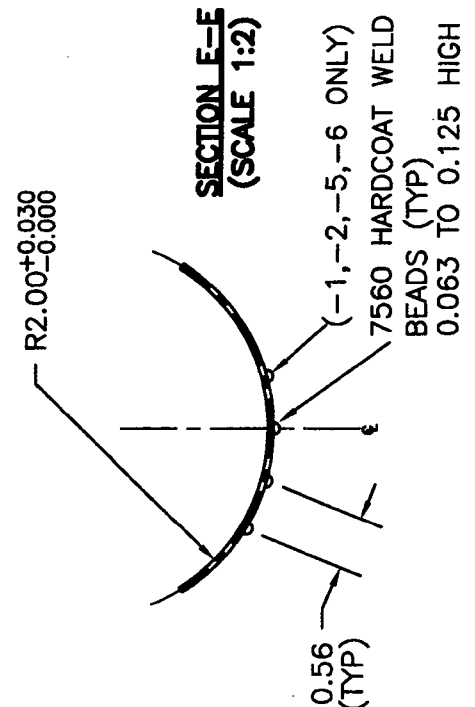
**SECTION F-F**  
(SCALE 1:2)



**DETAIL B**  
(SCALE 1:4)



**SECTION E-E**  
(SCALE 1:2)



RELEASED  
06.03.20

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**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

DART AEROSPACE LTD		Work Order: 36169
Description: WEAR PLATE		Part Number: D3315-1
Inspection Dwg: D3315-1 Rev: B		Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø .300	+ .006 - .001	.306	X			
.266	+/- .010	2.71	X			
.450	+/- .010	1455	X			
3.550	+/- .010	3.554	X			
5.464	+/- .010	5.457	X			
5.214	+/- .010	5.208	X			
4.402	+/- .010	4.401	X			
1.224	+/- .010	1.224	*			
2.57	+/- .030	2.57	X			
6.273	+/- .010	6.273	X			
8.224	+/- .010	8.224	X			
9.515	+/- .010	9.515	X			
11.429	+/- .010	11.429	X			
15.47	+/- .030	15.47	X			
16.379	+/- .010	16.379	X			
21.360	+/- .010	21.360	V			
23.474	+/- .010	23.474	X			
26.273	+/- .010	26.273	X			
29.42	+/- .030	29.42	X			

Measured by: HB
Date: 07-12-16

Audited by: E
Date: 07/12/16

Prototype Approval: n
Date: 7

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	